IT IS CLAIMED:

1. A method for treating a condition responsive to interferon tau therapy, selected from an autoimmune condition, cancer, or a viral infection, in a human subject, comprising

orally administering interferon-tau to the intestinal tract of the subject in an amount effective to produce an initial measurable increase in the subject's blood 2', 5'-oligoadenylate synthetase (OAS) level, relative to the blood OAS level in the subject in the absence of interferon-tau administration, and

continuing to administer interferon-tau to the intestinal tract of the subject in such effective amount, on a regular basis of at least several times per week, for a period of at least one month, independent of changes in the subject's blood OAS level.

- 2. The method of claim 1, wherein said interferon-tau is an ovine interferon-tau having a sequence identified as SEQ ID NO:2 or SEQ ID NO:3.
- 3. The method of claim 1, wherein said continuing administration is carried out on a daily basis.
- 4. The method of claim 1, for treatment of multiple sclerosis in the subject, wherein said continuing administration is carried out during the period of patient symptoms.
- 5. The method of claim 1, for treatment of hepatitis C infection in the subject, which further includes detecting the presence of infection in the subject, and said continuing administration is carried out for a period of several months past the time when no viral infection is detected in the subject.
- 6. The method of claim 1, for treatment of cancer in the subject, which further includes administered an anticancer agent to the subject during the period of continuing administration of interferon-tau.

7. The method of claim 1, which further includes monitoring the subject's blood OAS level to ascertain if the OAS level is increased following said administering.